## Opening Statement of the Honorable Fred Upton Subcommittee on Oversight and Investigations Hearing on "Combatting Superbugs: U.S. Public Health Responses to Antibiotic Resistance" June 14, 2016

(As Prepared for Delivery)

Today, we gather to discuss the U.S. public health response to antibiotic resistance in light of the recent discovery of a new superbug.

This superbug gene was first discovered by Chinese and British researchers in pigs, raw pork, and in a small number of people in China in November last year, but a recent case of a woman in Pennsylvania with E. coli is the first discovery of this rare gene, known as MCR-1, in the United States. A headline in The Washington Post captured the urgency – "The superbug that doctors have been dreading just reached the U.S." Concerns about this new threat are real, and they are being felt in Michigan and throughout the country.

The detection of this new antibiotic-resistant gene is troubling because it signals the potential arrival of an unstoppable superbug. This gene is resistant to a last-resort antibiotic and has the ability to move from one bacterium to another. While MCR-1 on its own is treatable by other antibiotics, disease experts tell us the fear is not if – but when – this gene transfers and merges with another superbug that is resistant to all other antibiotics. This would create the nightmare scenario of a bacterial infection that cannot be stopped with any known antibiotic treatment.

The continuing evolution of bacteria, the over-prescription of antibiotics, and the lack of new antibiotic development have all contributed to this problem. Our understanding of the MCR-1 gene is growing by the day, but there are still many questions that remain to be answered before we can be assured that we are doing everything that we can to protect the American people from this superbug and future challenges that arise from antibiotic-resistance.

The questions include: How did the bug get to the United States? Where did it come from? How does it spread? Are we prepared for an outbreak of an antibiotic-resistant bacterium? What is the federal government's plan to confront this public health challenge?

In addition to our concerns about this particular superbug, we need to take a look at antibiotic resistance as a whole. In response to the discovery of the MCR-1 gene in the Pennsylvania case, the CDC Director, Dr. Tom Frieden, commented that "[i]t basically shows us that the end of the road isn't very far away for antibiotics..." If that is true, minor bacterial infections could suddenly become fatal.

We need to evaluate antibiotic development and assess where the science is, what barriers exist, and how we can promote the discovery of new antibiotics. Through the GAIN Act in 2012, and the ADAPT Act which is part of 21st Century Cures, this committee has made numerous strides to foster and encourage the development of new antibiotics that can fight these superbugs.

In the meantime, we need to take appropriate measures, such as antibiotic stewardship programs, to ensure that antibiotics that already exist are being prescribed appropriately.

We thank the experts joining us this morning to discuss the federal response to this superbug and how antibiotic resistance is being addressed both as a nation and globally. The last thing we can afford, is looking back to today, and wishing we had done more.

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